

Title: Accelerator Physicist Location: Valencia, California

### **ABOUT NUSANO**

We are an early phase company committed to advancing the way radioisotopes are made. Nusano represents the first true turning point in the history of the field of radioisotope manufacturing since the advent of the cyclotron. By augmenting a standard linear accelerator with a proprietary high-current multiparticle ion source, our solution can generate radioisotopes with a very high yield and specific activity and is poised to become the state-of-the-art technology.

Our technology is uniquely suited for the generation of therapeutic radioisotopes. These radioisotopes, while historically challenging to produce in quantities and for the cost that allow for robust growth of the field, are on the precipice of widespread clinical use for personalized cancer therapy. Nusano is uniquely positioned to support and foster the growth of this important application.

Nusano is founded on the idea that the greatest scientific asset isn't raw material or technology but vision — and the freedom to follow that vision wherever it leads. So, while the treatments of tomorrow will surely be built on advanced physics and sophisticated chemistry, they'll be driven by creativity and fueled by spontaneity. In the world our technology enables, neither will have limits.

#### **DETAILS**

Nusano has an exciting opportunity for an **Accelerator Physicist** at our Valencia, CA facility. The Accelerator Physicist will lead the continuing development, and future installation, conditioning and commissioning of Nusano's RF accelerator systems for hadron acceleration consisting of a Radiofrequency Quadrupole and Drift Tube Linac. This position will interface with Nusano's internal science and engineering staff in addition to a number of external consultants and vendors.

### **DUTIES AND RESPONSIBILITIES**

- 1. Develop and implement work plans and schedules for the installation, conditioning and commissioning of RF structures for hadron acceleration
- 2. Oversee technical development and progress of the RF structures
- 3. Assist in the tuning of the RF structures
- 4. Particle-in-cell simulation of the RF structures
- 5. Reviewing and approving specifications for internal and external production
- 6. Interface with Nusano consultants to bring their knowledge and experience internal to Nusano
- 7. Assist with technical issues such as beam diagnostics and controls



## **EXPERIENCE & QUALIFICATIONS REQUIREMENTS**

- Minimum of five years of professional experience
- Experience designing, simulating, constructing, conditioning and commissioning RF accelerator structures
- Experience with diagnostic devices used to tune and commission RF accelerating structures
- Experience with CST and/or HFSS
- Experience with Vector Network Analyzers
- Experience with high-current ion sources, RFQs, and DTLs
- Excellent communication both, verbal and written
- Proven organization skills in a complex project
- Perfect fit for a corporate culture that emphasizes rapid development and multidisciplinary collaboration

# PREFERRED EXPERIENCE & QUALIFICATIONS REQUIREMENTS

- More than ten years of professional experience
- Experience working with EPICS to commission and run an accelerator
- Experience with accelerator codes, especially TraceWin and Toutatis

### **EDUCATION**

• MS/PhD in Physics

## PHYSICAL REQUIREMENTS

- Work to be conducted primarily in an office environment with limited exposure to
- production and a warehouse environment.
- Frequent use of computer with repetitive use of keyboard, mouse and manual dexterity.
- 2-4 weeks of travel per year for visiting vendors and attending conferences

### **APPLICATION**

We ask any interested applicants to submit their resumes to Recruiting@nusano.com.